

**REMARKS**

Applicants respectfully request the Examiner to reconsider the present application in view of the foregoing amendments to the claims and the following remarks.

***Status of the Claims***

Claims 1-20 and 23-29 are currently pending in the present application. Claims 10-19 and 25-29 have been withdrawn from further consideration as being drawn to a non-elected invention. Claims 21 and 22 have been cancelled. Claims 1-9, 20, 23 and 24 have been amended to more fully define and clarify the present invention.

Support for claim 1 can be found on page 13, line 33, to page 14, line 10 of the present specification. Support for the amendment "alcoholate or hydrate" to claims 1-9, 20, 23 and 24 can be found on page 33, lines 10-11, of the present specification. Support for common amendments to claims 1, 7 and 9 can be found on page 16, line 16, to page 17, line 17, and page 19, line 23, to page 20, line 31 of the present specification. Support for common amendments to claims 1, 2 and 9 can be found on page 24, lines 8-10 of the present specification.

Based upon the above considerations, entry of the present Amendment is respectfully requested.

***Claim Objections***

Claims 1-9 and 20-24 are objected to due to informalities. Applicants respectfully request that the Examiner hold the present objection in abeyance, pending an indication that the claims are otherwise in condition for allowance.

Further, claims 5, 6, 8, 9, 23 and 24 are objected to due to informalities. Applicants have amended these claims to separate the elements of the Markush groups, as indicated by the Examiner.

Applicants respectfully request reconsideration and withdrawal of the objection to claims 5, 6, 8, 9, 23 and 24.

***Issues Under 35 U.S.C §112, First Paragraph, Enablement***

Claims 1-9 and 20-24 stand rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the enablement requirement. The Examiner suggests that the claims contain subject matter not described in the specification in such a way as to enable one skilled in the art to make or use the invention commensurate within the scope of the claims. Applicants have cancelled claims 21 and 22, thus obviating the rejection as to these claims. Applicants respectfully traverse this rejection as to the remaining claims.

Although Applicants disagree with the Examiner's assertions, in order to further prosecution, Applicants have amended the claims as indicated above.

The Examiner asserts that of the provided examples, some fall outside of the restriction requirement and that of the remaining examples, there are no working examples of any compounds

with R, Z, or Ar groups other than was mentioned by the Examiner, nor have Applicants demonstrated any solvates.

As indicated in MPEP 2164.02, compliance with the enablement requirement of 35 U.S.C. § 112, first paragraph, does not turn on whether an example is disclosed. Further, MPEP 2164.02 also states that the specification need not contain an example if the invention is otherwise disclosed in such manner that one skilled in the art will be able to practice it without an undue amount of experimentation. *In re Borkowski*, 422 F.2d 904, 908, 164 USPQ 642, 645 (CCPA 1970). MPEP 2164.02.

Applicants respectfully submit that a specification disclosure which contains a teaching of the manner and process of making an invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented must be taken in compliance with the enablement requirement of 35 U.S.C. § 112, first paragraph, unless there is a reason to doubt the objective truth of these statements. *See In re Marzocchi*, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971); M.P.E.P. § 2164.04.

Here, Applicants have amended the claims to further define  $Z^1$ ,  $Z^2$ ,  $Z^3$ , Ar and “heteroaryl.” Additionally, the specification shows on pages 33-40 multi-step processes A-D which demonstrate how to make the compounds of the present invention. Applicants submit that the above-mentioned processes enable one skilled in the art to fully make the invention. Since all of the rejected claims ultimately depend from claim 1, claims 2-9 and 20, 23 and 24 also comply with the enablement requirement. Applicants respectfully request reconsideration and withdrawal of the present rejection.

***Issue Under 35 U.S.C §112, Second Paragraph, Indefiniteness***

The Examiner indicates on page 7 of the Office Action that the scope of “heteroaryl” and “heterocycloalkyl” within the claims requires clarification. The Examiner asserts that Applicants’ examples in the specification are not limiting and that Applicants have not defined these terms with reasonable clarity. Applicants respectfully traverse this rejection.

Applicants note that the term “heterocycloalkyl” referred to by the Examiner does not appear in the specification. The Examiner also uses an example of the term “heterobicycloalkyl” on page 8 of the present Office Action, which Applicants also submit does not appear in the specification.

Although Applicants disagree with the Examiner’s assertion, in order to further prosecution, Applicants have amended the claims to further clarify the claims. Applicants have amended claim 1, to further define “heteroaryl” to mean a monocyclic aromatic heterocyclic group and a condensed aromatic heterocyclic group, as described on page 13, line 33, to page 14, line 10 of the present specification.

That is, when a heteroaryl is a monocyclic aromatic heterocyclic group, it means a group, which is derived from a 5- to 8-membered aromatic ring which may contain 1 to 4 of oxygen atom, sulfur atom, and/or nitrogen atom and which may have a bonding position at any substitutable position. Further, if heteroaryl is a condensed aromatic heterocyclic group, it means a group wherein a 5- to 8-membered aromatic ring which may contain 1 to 4 oxygen atoms, sulfur atoms, and/or nitrogen atoms, is condensed with one to four 5- to 8-membered aromatic carbon cycles or the other

5- to 8-membered aromatic heterocyclic ring and which may have a bonding position at the any substitutable position.

Regarding the assertion that the terms “optionally substituted” and “substituted” are also indefinite, Applicants have amended claims 1, 7, and 9 to further clarify and define these terms within the claims by articulating the particular substituents.

Specifically, Applicants have amended “optionally substituted” to mean substitution by hydroxy, carboxy, halogen, halo alkyl, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, alkoxy, alkenyloxy, alkoxycarbonyl, nitro, nitroso, alkylamino, acylamino, aralkylamino, azide, aryl, aralkyl, cyano, isocyano, isocyanato, thiocyanato, isothiocyanato, mercapto, alkylthio, alkylsulfonyl, alkylcarbamoyl, sulfamoyl, acyl, formyloxy, haloformyl, oxalo, thioformyl, thiocarboxy, dithiocarboxy, thiocarbamoyl, sulfino, sulfo, sulfoamino, hydrazino, ureide, amidino, guanidine, phthalimide, oxo, and heterocyclic ring. Support for this amendment can be found on page 19, line 23, to page 20, line 31 of the present specification.

Further, the claims were also amended so that “optionally substituted amino,” “optionally substituted carbamoyl” and “optionally substituted carbamoylcarbonyl” mean substituted by alkyl, benzyl, carbamoylalkyl; mono or di alkylcarbamoyl alkyl, hydroxyalkyl, heterocycle alkyl, alkoxycarbonyl alkyl, mono or di alkylamino alkyl, alkoxyalkyl, acyl, arylcarbonyl, aralkyl, hydroxy, alkyl sulfonyl, cycloalkyl, alkylamino sulfonyl, alkylaminocarbonyl, alkoxycarbonyl, cycloalkylcarbonyl, sulfamoyl, alkyl carbonylamino, heterocycle and amino.

Support for this amendment can be found on page 16, line 16, to page 17, line 17 of the present specification.

Applicants submit that the claims particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants respectfully request reconsideration and withdrawal of the present rejection.

***Issue Under 35 U.S.C §112, Second Paragraph, Indefiniteness***

Claims 21 and 22 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants herein cancel claims 21 and 22, thus making the present rejection moot.

***Issue Under the Obviousness-Type Double Patenting Doctrine***

The Examiner indicated that claims 21 and 22 may be objected to under 37 C.F.R. § 1.75 as being a substantial duplicate of claim 20. Applicants herein cancel claims 21 and 22, which renders the potential objection moot.

Application No. 10/583,796  
Reply to Office Action of April 22, 2009

Docket No. 2006\_0854A

**CONCLUSION**

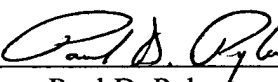
Applicants respectfully submit that all of the objections and rejections raised by the Examiner have been overcome, and that the present application now stands in condition for allowance.

Should there be any outstanding matters that need to be resolved, the Examiner is respectfully requested to contact Paul D. Pyla at the telephone number below, in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized to charge payment or credit any overpayment to Deposit Account No. 23-0975 for any additional fees required under 37.C.F.R. §§1.16 or 1.17.

Respectfully submitted,

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